

AMENDMENTS TO THE CLAIMS:

This listing of the claims will replace all prior versions, and listings, of the claims in this application.

1. (Currently Amended) A method of allocating communication ~~channels~~ slots in a communication system comprising a plurality of base stations each for communicating with at least one mobile station, the base stations capable of communicating via any of a predetermined group of ~~channels~~ slots, and some of the base stations being susceptible of being interfered with by other of the base stations in some of the ~~channels~~ slots of said group of ~~channels~~ slots, the method comprising the steps of:

predetermining, for each base station, a classification for each ~~channel~~ slot according to the probability of interference at the ~~channel~~ slot with other base stations of the plurality of base stations upon a request of at least one mobile station to initiate communication via a base station, comprising assigning as owned by said each base station and as avoided by said other base stations a slot in which said other base stations interfere with said each base station,

assigning as owned by said other base stations and as avoided by said each base station remaining slots in which said other base stations interfere with said each base station, and

assigning as shared by said each base station and said other base station slots in which said other base stations interfere with said each base station if used simultaneously with said each base station and which are not assigned as owned by either; and

allocating on request a ~~channel~~ slot according to the predetermined classification and a desired quality class of transmission.

2. (Currently Amended) The method of claim 1, wherein each said ~~channel~~ slot is a time slot.

3. (Canceled)

4. (Original) The method of claim 1, wherein:

the communication system further includes a controller connected to each base station;
said predetermination for each base station is reported to the controller; and
said allocating is performed in the controller.

5. (Currently Amended) The method of ~~claim 3~~ claim 1, wherein:

the communication system further includes a controller connected to each base station;
said predetermination for each base station is reported to the controller;
said allocating is performed in the controller; and
the controller maintains an indication of which ~~channels~~ slots are currently allocated for each base station.

6. (Currently Amended) The method of claim 5, wherein:

if neither an owned ~~channel slot~~ nor a shared ~~channel slot~~ of a first base station is available for a requested communication, the controller determines whether any avoided ~~channel slot~~ slot of the first base station is not in use by a second base station owning that ~~channel slot~~, and if so, that ~~channel slot~~ slot is allocated for the requested communication.

7. (Original) The method of claim 2 wherein the step of allocating is further according to location of a mobile station to be communicated with.

8. (Currently Amended) Apparatus for allocating communication ~~channels~~ slots in a communication system comprising a plurality of base stations each for communicating with at least one mobile station, the base stations capable of communicating via any of a predetermined group of ~~channels~~ slots, and some of the base stations being susceptible of being interfered with by other of the base stations in some of the ~~channels~~ slots of said group of ~~channels~~ slots, the apparatus comprising a logic unit configured to:

predetermine, for each base station, a classification for each ~~channel slot~~ according to the probability of interference at the ~~channel slot~~ with other base stations of the plurality of bases stations upon a request of at least one mobile station to initiate communication via a base station, comprising assigning as owned by said each base station and as avoided by said other base stations a slot in which said other base stations interfere with said each

base station,

assigning as owned by said other base stations and as avoided by said each base station
remaining slots in which said other base stations interfere with said each base station, and

assigning as shared by said each base station and said other base station slots in which said
other base stations interfere with said each base station if used simultaneously with said
each base station and which are not assigned as owned by either; and

allocate on request a ~~channel~~ slot according to the predetermined classification and a
desired quality class of transmission.

9. (Currently Amended) The apparatus of claim 8, wherein each said ~~channel~~ slot is a time
slot.

10. (Canceled)

11. (Original) The apparatus of claim 8, further comprising a controller connected to each
base station and configured to:

receive said predetermination for each base station is reported to the controller; and

to be a portion of said logic unit for performing said allocating.

12. (Currently Amended) The apparatus of claim 11, wherein the controller maintains an
indication of which ~~channels~~ slots are currently allocated for each base station.

13. (Currently Amended) The apparatus of claim 12, wherein:

if neither an owned ~~channel~~ slot nor a shared ~~channel~~ slot of a first base station is available
for a requested communication, the controller is configured to determine whether any
avoided ~~channel~~ slot of the first base station is not in use by a second base station owning
that ~~channel~~ slot, and if so, to allocate that ~~channel~~ slot for the requested communication.

14. (Currently Amended) The apparatus of claim 9, wherein the logic unit is configured to allocate a ~~channel~~ slot further according to location of a mobile station to be communicated with.

15. (Currently Amended) Apparatus for allocating communication ~~channels~~ slots in a communication system comprising a plurality of base stations each for communicating with at least one mobile station, the base stations capable of communicating via any of a predetermined group of ~~channels~~ slots, and some of the base stations being susceptible of being interfered with by other of the base stations in some of the ~~channels~~ slots of said group of ~~channels~~ slots, the apparatus comprising a logic means configured to:

predetermine, for each base station, a classification for each ~~channel~~ slot according to the probability of interference at the ~~channel~~ slot with other base stations of the plurality of bases stations upon a request of at least one mobile station to initiate communication via a base station, comprising assigning as owned by said each base station and as avoided by said other base stations a slot in which said other base stations interfere with said each base station,

assigning as owned by said other base stations and as avoided by said each base station remaining slots in which said other base stations interfere with said each base station, and

assigning as shared by said each base station and said other base station slots in which said other base stations interfere with said each base station if used simultaneously with said each base station and which are not assigned as owned by either; and

allocate on request a ~~channel~~ slot according to the predetermined classification and a desired quality class of transmission.